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ECONOMIC COMMISSION FOR AFRICA

Sixth meeting of the Technical
Preparatory Committee of the
Whole

Arusha, United Republic of Tanzania,
15-22 April 1985

Item 10 of the provisional agenda*

ECONOMIC COMMISSION FOR AFRICA

Twentieth session of the Commission/
Eleventh meeting of the Conference
of Ministers

Arusha, United Republic of Tanzania,
25-29 April 1985

Item 11 of the provisional agenda*

FOLLOW-UP ACTIONS ON RESOLUTIONS AND DECISIONS ADOPTED
BY THE NINETEENTH SESSION OF THE COMMISSION AND TENTH
MEETING OF THE CONFERENCE OF MINISTERS

(Annex II only)

*E/ECA/TPCW.6/1/Rev.1
E/ECA/CM.11/1/Rev.1

Annex II

UNITED NATIONS SUDANO-SAHELIAN OFFICE

PROJECT OF THE GOVERNMENTS OF ALL AFRICAN MEMBER STATES
OF THE ECONOMIC COMMISSION FOR AFRICA

Draft Project Document

Project title: ESTABLISHMENT OF AN AFRICAN CENTRE OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT (ACMAD)

Project number: RAF/85/.....

Duration: 6 years

Sector: Environment

Subsector: Combating drought and desertification

Government implementing agencies: Ministries responsible for the Meteorological Departments in ECA member States

Executing agency: United Nations Economic Commission for Africa in co-operation with the World Meteorological Organization

Associated executing agencies: FAO, UNEP, UNSO, UNRISD

Estimated starting date: June 1985

	<u>Phase I, 1986-1987</u>	<u>Phase II, 1988-1990</u>
<u>Government inputs:</u> (in kind)	\$US 210,000	\$US 510,000
<u>UNSO input:</u>	1,633,000	7,471,000
<u>ECA input:</u>	118,000	177,000
<u>WMO input:</u>	112,000	168,000
<u>FAO input:</u>	62,000	93,000
<u>UNEP input:</u>	72,000	108,000
<u>Grand total:</u>	<u>\$US 2,207,000</u>	<u>\$US 8,527,000</u>

Section I - LEGAL CONTEST

Please delete paragraph 2.

Section II - THE PROJECT

- A. Development objectives: Please renumber paragraph as 2.
- B. Immediate objectives: Please change paragraph 4 to read 3.
- C. Special considerations: Please delete paragraph 5 and replace by the following three paragraphs, renumbered 4 to 6:

4. The project to establish an African Centre of Meteorological Applications for Development (ACMAD) will promote technical cooperation (TCDC) among the 36 African countries affected by drought and desertification. The Centre will collect meteorological data and observations from each affected African country on a regular basis (probably weekly), process and analyse the data by electronic computers, compare the results with weather data supplied by satellites over the same period, and disseminate regular reports on the weather patterns and trends in a country, including the subregion around it. Thus one of the functions of the Centre will be to provide information as an early warning system for drought and desertification in the affected African countries, besides its research and training activities.

5. The activities of the proposed centre ACMAD will complement the FAO Global Information and Early Warning System on Food and Agriculture which makes use of agrometeorological data obtained by monitoring water balance of agricultural crops in the field every ten days. Also, it is known that the International Livestock Centre for Africa (ILCA) has been receiving fully processed satellite imagery of the vegetation cover in Africa from NASA Goddard Space Flight Centre in the USA obtained by the National Oceanic and Atmospheric Administration (NOAA) satellite. The NOAA-7 satellite gives an effective large-scale reconnaissance of the vegetation cover by measuring the earth's reflectance three times a month for three consecutive days. From the nine NOAA-7 images per month sent to a satellite receiving station for any area of the world, a computer can process the digital tape data to indicate: the effect of drought on the plant cover to serve as early warning system; the spread of desertification over a time interval; seasonal changes in the vegetation cover, including bushfires, flooding, deciduousness, deforestation, regrowth; and the grass biomass production in rangelands in kg/ha., especially over inaccessible parts in arid lands.

6. Whilst the FAO Early Warning System is global and makes use of agrometeorological data from some Sahelian and some southern African countries in SADCC, the ILCA/NASA project and the ECA/WMO proposed ACMAD centre will cover the whole of Africa, with ILCA making use of satellite imagery of vegetation patterns and changes and ACMAD making use of ground and upper atmospheric observations of meteorological data for application to development activities.

D. Background and justification

Please renumber paragraphs from 6 to 9 to read 7 to 10.

E. Outputs: and F. Activities: Please renumber paragraphs from 10-12 to read 11-13.

G. Inputs:

(i) Please renumber the paragraph as 14 and re-order the contributions (a) to (f) as follows under these headings:

(a) Government inputs: (see page 11).

(b) UNSO inputs: (see pages 12-14, which is revised as indicated below).

(c) WMO inputs: (see page 10).

(d) Inputs by other agencies and organizations (FAO, UNEP): (see pages 11-12).

(e) ECA inputs: (see page 10).

(ii) Wherever UNDP/UNSO appears, delete UNDP leaving UNSO.

(iii) New (b) UNSO inputs to read as follows:

UNSO's contribution to the project is expected to start after the ECA Conference of Ministers has accepted the Report of the ECA/WMO Feasibility Study to establish the African Centre of Meteorological Applications for Development (ACMAD) in 1985. During Phase I (1986-1987) and Phase II (1988-1990) UNSO's contribution is estimated to be as follows:

Phase I, 1986-1987

(i)	<u>Personnel at ACMAD, Nairobi (per year)</u>	<u>M/M</u>	<u>In \$US</u>
	a. Scientific Executive Director (L6)	12	170,000
	b. Five senior scientists (L4/L5)	12	620,000
	c. Short-term consultancy for training	6	25,000
	d. Administrative support:		
	i. 10 technicians/secretaries (G6-G9)	12	180,000
	ii. 2 administrative assistants (L1/L2)	12	168,000
(ii)	<u>Travel of project personnel (ECA and WMO)</u>		30,000
(iii)	<u>Mission cost (participation by UNSO)</u>		10,000
(iv)	<u>Training workshops at ACMAD, Nairobi (one per year)</u>		
	a. Servicing, interpretation and translation for (10-14 days)		20,000
	b. 20 national specialists, travel and DSA for (10-14 days)		60,000
(v)	Subtotal		1,283,000
(v)	<u>Equipment for ACMAD during Phase I (1986-1987)</u>		
	a. <u>None-expendable equipment</u>		
	<u>Quantity</u>	<u>Description</u>	<u>Cost in \$US</u>
	1	Minicomputer (VAX 750)	85,000
	5	Microcomputers	25,000
	1	Executive desk and chair	700
	6	Junior executive desks and chairs	30,000
	4	Secretarial desks and chairs	20,000
	8	Office desks and chairs	40,000
	5	IBM electric typewriters	90,000
	5	Typewriter carrier desks	400
	20	Filing cabinets with keys	10,000
	20	Bookcases and/or shelves	10,000
		Sub-Total	311,100
	b. Expendable		10,000
(vi)	<u>Reporting costs (Printing and dissemination of weather bulletins fortnightly and climate reports)</u>		24,000
(vii)	<u>Contingencies at ACMAD</u>		5,000
	UNSO Grand total for Phase I (1986-1987):		<u>\$US 1,633,100</u>

Phase II, 1988-1990 (additional staff and equipment to Phase I)

	<u>M/M</u>	<u>In \$US</u>	
(i) <u>Personnel</u> at ACMAD, Nairobi (per year)			
a. 5 additional senior scientists, (L4/L5)	12	1,200,000	
b. 10 additional technicians/secretaries, (G6-G9).....	12	580,000	
c. 2 more administrative assistants, L1/L2)	12	336,000	
(ii) <u>Equipment</u> for ACMAD during Phase II, 1988-1990			
a. <u>Non-expendable equipment</u>			
<u>Quantity</u>	<u>Description</u>	<u>Cost in \$US</u>	
1	Computer Main Frame (CRAY II)	3,500,000	
10	Microcomputers	60,000	
5	Junior executive desks and chairs	30,000	
4	Secretarial desks and chairs	20,000	
8	Office desks and chairs	44,000	
4	IBM electric typewriters	90,000	
4	Typewriter carrier desks	400	
20	Filing Cabinets	10,000	
20	Bookcases and/or shelves	10,000	
1	Indexer	600	
	Total	3,765,000	
b. Expendable: soft ware		<u>60,000</u>	
UNSO additional total for Phase II (1988-1990)		\$US 5,941,000	
(f) <u>Estimated project cost</u>	<u>Per year</u>	<u>Total for Phase I</u>	<u>Total for Phase II</u>
		(in \$US)	
(i) ECA contribution	59,000	118,000	177,000
(ii) WMO contribution	56,000	112,000	168,000
(iii) FAO contribution	31,000	62,000	93,000
(iv) UNEP contribution	36,000	72,000	108,000
(v) Member States contribution	-	210,000	510,000
(vi) UNSO contribution	-	1,633,000	7,471,000

H. Work plan

15. A provisional work plan to indicate the major activities to be carried out each quarter of a year from 1985 to 1990, is attached as Annex II B. A more detailed work plan for each phase, I - 1986-1987, and II - 1988-1990 will be worked out for the implementation of the project, in consultation with UNSO, WMO and ECA.

I. Preparation of the framework for effective participation of national and international staff in the project

16. After the establishment of the Centre (ACMAD), participating governments will second national experts in meteorology to work at the centre for limited periods of three to six months, as stated under government inputs in paragraph 14 (a) of this project document.

J. Development support communications

17. Not applicable.

K. Institutional framework

18. The Joint Intergovernmental Regional Committee on Human Settlements and Environment (Joint IGRC/HUS/ENV), as a subsidiary body of the Commission will review progress on the establishment of the centre as well as on the work programme of ACMAD after establishment. The Joint Committee (IGRC/HUS/ENV) will report through the Technical Preparatory Committee of the Whole to the ECA Conference of Ministers of Planning and Economic Development. These legislative bodies of the Commission will formulate policies, issue directives and take decisions on the work of the centre (ACMAD).

19. The African Centre of Meteorological Applications for Development (ACMAD) will be governed by a management authority such as a board of governors consisting of representatives from various ministries (agriculture, water resources, environment, natural resources, energy, forestry, wildlife, development and planning) of the Government of Kenya, and representatives from UNSO, ECA, WMO, FAO, UNEP, the UNDP Resident Co-ordinator, the University of Nairobi, Kenya, the Director for the Regional Centre for Services in Surveying, Mapping and Remote Sensing (RCSSMRS), Kenya, with the Executive Director of ACMAD acting as Secretary to the board. The Board of Governors will report to the Joint Committee (IGRC/HUS/ENV) at the latter's meetings every 18 months.

20. The Economic Commission for Africa and the World Meteorological Organization will serve as joint executing agencies for the project from the feasibility stage until the final establishment of the centre under Phases I and II. The ECA Secretariat, through its Environment Section, Social Development, Environment and Human Settlements Division will provide the necessary administrative backstopping whilst professional and technical guidance to ACMAD will be provided by the WMO Secretariat through its World Climate Programme Department for both training and research.

L. Prior obligations and prerequisites

21. Not applicable.

M. Future UNDP or UNSO assistance

22. The provision of financial support for the establishment of the African Centre of Meteorological Applications for Development (ACMAD) during Phase I by UNSO is being supported by other United Nations organizations (ECA, WMO, UNEP, FAO). It is noted that the level of support for Phase II is far greater than that for Phase I, hence UNDP's assistance as well as bilateral support may have to be solicited for the successful implementation of the project.

III. SCHEDULE OF MONITORING, EVALUATION AND REPORTS

A. Monitoring and technical reviews

23. The UNDP Resident Representative accredited to the Government of Kenya will convene the meetings of the management authority of the centre in Nairobi, in cooperation with the director. He will monitor the implementation of the project in accordance with the policies and procedures established by UNDP/UNSO. ECA, WMO and UNSO will carry out technical reviews of the project activities at the end of Phase I and II.

B. Evaluation

24. The project will be subjected to evaluation in accordance with the policies and procedures established for the purpose by UNDP/UNSO. The organization, terms of reference and timing of evaluation will be decided by consultations between UNSO, ECA and WMO.

C. Progress and terminal reports

25. The project Director of ACMAD will prepare six monthly progress reports on the activities and achievements of the project with the cooperation of ECA and WMO. At the end of the project after Phase II, the executing agencies, ECA and WMO, will submit a comprehensive terminal report evaluating the overall performance of the project in relation to its objectives, its impacts and future trends for improving national capabilities to forecast drought.

IV. BUDGET

26. The estimated cost of the services and facilities to be provided for the project by UNSO is detailed in the budget section of this document, as Annex II A.

PROJECT BUDGET COVERING UNSO'S CONTRIBUTIONS
(in US dollars)

Region: Africa

Project No.: RAF/85/.....

Project title: Establishment of an African Centre of Meteorological Applications
for Development (ACMAD)

PHASE I

		1986		1987	
		M/M	\$US	M/M	\$US
10.00	<u>PROJECT PERSONNEL</u>				
11.00	<u>EXPERTS</u>				
11.01	Scientific Director (L6)	12	80,000	12	90,000
11.02	Senior Scientists (L4/L5)	60	300,000	60	320,000
11.03	Short-term consultants	3	12,500	3	12,500
11.99	Component total	75	392,500	75	422,500
13.00	<u>ADMINISTRATIVE SUPPORT PERSONNEL</u>				
13.01	Administrative Assistants (L1/L2)	24	80,000	24	88,000
13.02	Secretarial support (G6-G9)	48	32,000	48	40,000
13.03	Technicians (G6-G9)	72	50,000	72	58,000
13.99	Component total	144	162,000	144	186,000
15.00	<u>TRAVEL</u>				
15.01	Travel of project personnel	-	15,000	-	15,000
16.00	<u>MISSION COSTS</u>				
16.01	Mission travel by UNSO	-	5,000	-	5,000
19.00	Component total	-	20,000	-	20,000

Project component	PHASE I			
	1986		1987	
	M/M	\$US	M/M	\$US
30.00 <u>GROUP TRAINING</u>				
31.00 Servicing of 2 Training workshops	-	10,000	-	10,000
32.00 Travel and DSA for 20 participants for 10-14 days to each workshop	-	28,000	-	32,000
39.00 Component total	-	38,000	-	42,000
40.00 <u>EQUIPMENT</u>				
41.01 Expendable equipment	-	5,000	-	5,000
41.02 Non-expendable equipment	-	311,100	-	
49.00 Component Total	-	316,100	-	5,000
50.00 <u>MISCELLANEOUS</u>				
51.01 Reporting costs (translation, etc.)	-	10,000	-	14,000
51.02 Sundries (dissemination of fortnightly bulletins and climate reports)	-	2,500	-	2,500
51.99 Component total	-	12,500	-	16,500
99.00 Grand total for PHASE I 1986-1987	219	941,100	219	692,000
		= 1,633,100		

PHASE II

Project component	1988		1989		1990	
	M/M	\$US	M/M	\$US	M/M	\$US
10.00 <u>PROJECT PERSONNEL</u>						
11.00 <u>EXPERTS</u>						
11.01 Scientific Director (L6)	12	92,000	12	95,000	12	98,000
11.02 Senior scientists (L4/L5)	84	502,000	96	576,000	120	722,000
11.03 Short-term consultants	4	13,000	4	14,000	4	15,000
11.99 Component total	100	610,000	112	685,000	136	832,000
13.00 <u>ADMINISTRATIVE SUPPORT PERSONNEL</u>						
13.01 Administrative Assistants (L1/L2)	36	130,000	48	170,000	48	204,000
13.02 Secretarial support (G6-G9)	72	86,000	96	116,000	96	127,000
13.03 Technicians (G6-G9)	96	120,000	120	148,000	120	163,000
13.99 Component total	204	336,000	264	434,000	264	494,000
15.00 <u>TRAVEL</u>						
15.01 Travel of project personnel	-	17,000	-	20,000	-	23,000
16.00 <u>MISSION COSTS</u>						
16.01 Mission travel by UNSO	-	5,000	-	5,000	-	5,000
19.00 Component total	-	22,000	-	25,000	-	28,000
30.00 <u>GROUP TRAINING</u>						
31.00 Servicing of 3 Training workshops	-	10,000	-	10,000	-	10,000
32.00 Travel and DSA for 20 participants for 10-14 days to each workshop	-	30,000	-	30,000	-	30,000
39.00 Component total	-	40,000	-	40,000	-	40,000
40.00 <u>EQUIPMENT</u>						
41.01 Expendable equipment	-	20,000	-	20,000	-	20,000
41.02 Non-expendable equipment	-	-	-	3,765,000	-	-
49.00 Component total	-	20,000	-	3,785,000	-	20,000

PHASE II

Project component	1988		1989		1990	
	M/M	\$US	M/M	\$US	M/M	\$US
50.00 <u>MISCELLANEOUS</u>						
51.01 Reporting costs (translations etc.)	-	15,000	-	16,000	-	17,000
51.02 Sundries (dissemination of fortnightly bulletins and climatic reports)	-	3,000	-	4,000	-	5,000
51.99 Component total	-	18,000	-	20,000	-	22,000
99.00 Grand total for PHASE II 1988 - 1990	304	1,046,000	376	4,989,000	400	1,436,000
				=		<u><u>7,471,000</u></u>

K. WORK PLAN/PROJECT IMPLEMENTATION PLAN

For the Project Life Span

Object: Establishment of an African Centre of Meteorological Applications for Development (ACMAD)

Object number: RAF/85/.....

Funding source: UNSO

Division/Programme: SDEHS Division - Environment in Africa Programme

Outputs and Activities	Primary Responsibility	Phase I -- Implementation Schedule 1985 to 1987												Remarks
		1985 (Quarters)				1986 (Quarters)				1987 (Quarters)				
		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
Inter-Agency Mission to Govt. of Kenya	ECA/WMO	X												
Report of Feasibility Study on ACMAD to ECA Conference of Ministers	ECA		X											
Ad-hoc Inter-Agency Meeting on follow-up action for ACMAD	ECA		X											
Report to 3rd meeting of Joint Intergovt. Committee on Human Settlements & Environment	ECA				X									
ECA/WMO Agreement with Govt. of Kenya to set up ACMAD	ECA/WMO				X									
Recruitment of Director and staff for ACMAD	ECA/WMO				X									
Acquisition of data processing and other equipment for ACMAD	ECA/WMO				X									

		Phase I - Implementation Schedule 1985 to 1987												
Outputs and Activities	Primary Responsibility	1985 (Quarters)				1986 (Quarters)				1987 (Quarters)				R e m a r k s
		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
Establishment of networks with WMO's RMC, RTH with ACMAD	WMO/ACMAD					X								
Printing and dissemination of weather reports by ACMAD	ACMAD					X	X	X	X	X	X	X	X	
Establishment of global networks with WMO/WWW main trunk and satellites	WMO/ACMAD							X						
Development of Work Programme and Budget for PHASE II	ECA/WMO/ACMAD								X					
Annual Training Workshops for 20 nationals	ECA/WMO/ACMAD								X				X	

[illegible]